CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY		USSR		REPORT		25 X		
			Soviet SKORYY-Class Destroyer			DATE DISTR.	29 April 1955	
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	1.	Names		•	/IIIIOwii			
	2.	Date o	f keel layin	ا اعد: ل	Jnknown; probably	not prior to 1951.		25X1
	3.		f launching	_	• -	not prior to 1953.		05)//
	4.		of completion	. : I	Probably early 195	53 or later.	·	25 X 1
	5.		ng yards		Unknown; probably	all Leningrad shipy	ırdä.	1
	6.	Charac	teristics	•	Approximate stando Displacement duri: 2,900 tons.	um displacement-abou ard displacement-abou ng trial runs estima	ut 2,500 tons. ted at about	,
				- 1	Length over all Molded beam		125 m 12 m	
				;	Draft during tria	l runs estimated at	3.8 m	:
	7.	Armame	ent:					
		Gun A	rmament:					
		Four I	20 as14b	er enne	of two takin moun	ts with enclosed pre	tective shields.	
					carry four 37- or	mounts with enclosed 40-mm AA guns, moun	CSC OU SMET	25X
		contr there	ol position would be ei	(Fc pos	rels all together	ion and aft of the a ley are probably fitt after the platfor to carry the weight at they can be used	ms fitted abeam, and the recoil	5.7° s
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such twin guns, (their supports over the ship's sides being noticeably weaker than the platforms mounted on the forecastle deck). The latter rest on three legs, where the former are fitted with only one strut of the same kind. In the first case, the platforms are part of the rather heavy substructure of the bridges; in the latter case, they simply lean against the wall near the smokestack. It also seems possible that, for reasons of stability, the idea of utilization of this place in front of the bridge to mount such a twin AA gun was given up.

Destroyer mounts a different type of light AA gun carrying seven single-mount barrels: aft of the after Fc position, one each abeam the after smokestack and on the forecastle dack, near the bridge superstructure, abeam the forward Fc position, and one forward of the bridge.

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Torpedo Armament:

Two, quintuple 533-am caliber torpedo tubes; No. I torpedo mount being placed between the two smokestacks, and No. II between the after smokestack and the after superstructures.

Mines:

Tracks for about 80 mines. It is not known if stability of the vessel is such as to permit the carrying of such a large number of mines.

8. Fire control:

a. A main fire control station for the main guns with two superimposed rangefinders, of approximately 5 meters base length, is fitted inside the bridge structure aft of the conning tower. Approximate heights of their axes above the water:

lower rangefinder 9.5 m upper rangefinder the objective lens of the pointer gear 11 m

The traversing angle of the rangefinders of the main fire control station is believed to give an all-round view through twice 360° and is only slightly hampered by the mast structure in the right-aft direction. On destroyers the objective lens of the pointer gear, which is fitted in the rotation axis of the Fc station, is arranged inside a truncated conical hood, and the lens can be closed by a hinged flap adapted to it.

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On destroyers the pointer gear projection is somewhat differently shaped. It is fitted with a detachable cylindrical domed

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The Fc station is possibly protected against splinters by light armor plates, which, however, are not believed to be very heavy for reasons of saving weight.

b. The after Fc position, which serves as an auxiliary Fc position, is equipped with a rangefinder of about 4 m base and seems to be primarily intended for observing and ranging aerial targets. It also had an all-round observation angle of twice 360°. It is mainly used for controlling the fire of the 76-am twin gum mounted aft of it. Close to the objective lens of the pointer-gear, a radar scanner system designed to take the bearing and altitude of aerial targets is fitted atop the Fc position casing maich is only meant to serve as a weather shelter. (See paragraph 9 g.)

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Radar: On destroyers

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- a. A large, cylindrical radar scanner made of sheet metal, about 60 on high, probably designed for navigational purposes, is mounted on a heavy bracketed platform at the foremast.
- b. A large radar scanner of slightly spherical shape, 1 or 1.1 m high with well-rounded narrow sides, rests on a heavy substructure atop the tripodmast structure, and is probably used for fire control against floating targets.
- c. A somewhat lighter scanner, superimposed on the scanner described under (b) and apparently of conventional merchant—ship type, seems to be an all—purpose observation gear. It is mounted on a platform fitted just below the uppermost point of the structure, at the after edge of the tripod mast structure, and is supported by oblique crossing struts, which lean against the two after legs of the tripod mast. This scanner stands about 1.8 meters behind the scanner mentioned under (b) and is placed 30 to 40 centimeters higher.
- d. An item consisting of a thin rod, about 1.7 m high, and fitted in the middle of a comparatively thick ring, is mounted over 3.5 m above the platform under (c) at the same distance from the top of the tripod mast, superimposed above the item under (c).
- e. A thin rod like that under (d), fitted to the port side arm of the yard of the after tropod must serves the same purpose as under d.
- f. An older-type direction finding gear mounted above the large scanner on the bracketed platform under(s).
- g. A four-scanner equipment mounted on the after Fe position, and devised to determine the altitude and bearing of aerial targets.

On destroyers

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- a. No equipment of identical or of similar shape to that above under (a) was observed.
- b. A sheet metal cylindrical scanner, about 45 to 40 cm high, mounted on a substructure similar to that on destroyers Nos. 15 and 31 as described above, seems to be for navigational purposes.

Remarks:

on destroyers an item is visible on the mast at the spot where the heavy bracket plassform of the nagigational radar ecemer is fitted on destroyers.	25X1
is hidden by a canvas cover, about 65 cm in diameter and 30 to cm high, whereas in destroyer its shape reminds one of a super-sized	25X1
lamp. It is possibly a sound signal apparatus.	25X1

Submarine sound apparatus:

No information available.

Means of radio communications:

- a. Whip antennas, arranged in pairs on each side of the conning position.
- b. Whip antennes, en each side of the forward smokestack.

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- A single whip antenna at the after Fc position.
 Remark: Its purpose was not positively identified.
- d. Antenna with dipoles mounted on the platform of the forward tripod must, between the scanners of the all-purpose observation equipment and what is believed to be radar observation equipment. Probably for use in connection with radio telephonic communication.
- e. A dipole 2.5 m long in front of the top of the after tripod mest.
- f. A dipole about 1.3 m long on the starboard yard-arm of the after mast.
- g. A markedly thick rod, about 2.15 m long, held in place at two-fifths of its length from below; fitted with a system of rods and mounted on top of the middle leg of the after tripod mast. (See plane) The purpose of the items under(c) through (g) could not be determined. Item (g) is possibly the antenna of an older-type air observation device.

10. Armor:

Side armor: It is possible that the sheer strake in the range between the after Fc position and the conning position has been made of high tension material to afford a certain amount of protection to the engine room section without increasing too much its thickness, and to serve as a light protection against splinters.

Deck armor: None.

Turrets: The protective shields of the main guns and of the 76-mm mounts are designed for light splinter protection. No barbettes or casemates.

Conning tower: A splinter-proof position giving protection against splinters and fire from aircraft weapons is fitted below the conning position.

- 11. Complement: 350.
- 12. Propulsion Plant:

Maximum speeds unknown.

The propulsion plant consists of oil-fired boilers and steam turbines driving two propeller screws.

Additional and General Remarks

General Design:

The arrangement of the general appearance of the vessel is in line with prevailing ideas on destroyer design. The forecastle deck of these vessels extends for about one-third of their total length, while the deck in the midships section and the fantail are one deck-height lower. The deck sheer runs straight and, between the two twin gans of the main arrangement, parallel to the designed waterline. In way of each of the gun mounts, i.e., forward on the forecastle deck and aft of the deck house, there is a bend in the sheer, from which the deck rises in a straight line. The raked stem, with an overhang of between 60 and 65 degrees, is about 80 cm, and the upper edge of the transom stern is about 30 cm higher than the deck midships.

The forward frames in way of the bridge and the fore turret are slightly inclined with a comparatively small bend in the upper part. The sharp edge between the sheer strake and the forecastle deck stringer has been straightened by applying a vertical strip, 30 to 35 cm wide, to facilitate the building operations, to reach better power flux, and to avoid, inside the thesel, the

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corner between the outer skin and the deck which is so difficult to keep in order. The rake of the transom stern, about 30 degrees in relation to the waterline, is a most remarkable feature and probably intended to facilitate the free dropping of the mines, although the breaking away of the stern wave would be rendered more difficult by the heavy inclination of the stern unless the edge angle were artificially reduced as shown:







The upper edge of the transom stern is formed by a vertical strip, about 1 m high, with cuts for the mine-launching tracks.

Hull (constructional system):

The hulls of the destroyers are obviously entirely welded and built according to the longitudinal-transverse frame system developed by the German Mavy. The transverse frames are spaced about 1.5 m and the longitudinal tie plates about 50 cm, as far as could be observed.

The sheer strake in the midships section, obviously strengthened, reaches as far as 3 m under the forecastle deck in front of the forward edge of the bridge. Such overlapping is necessary and usual practice to assure regular continuation of the longitudinal strength at the "break" on the after edge of the forecastle deck. In the present case, it is notable that this strengthening reaches far ahead, extending beyond the other bulkhead of the fore boiler room (about 7 m forward of the after end of the forecastle deck). It seems doubtful, although not impossible, that this plate strake, about 1 m in width, is meant to be, to a certain degree, splinter-proof; although this is only vaguely indicated, it could be assured by using adequate armor-like material. In fact, this plate seems to indicate this possibility, as it is tapered at its upper edge similarly to the reinforced waterline strake of the light cruisers in the former German Navy. Since the skin plating, as is the usual practice with destroyers, is rather thin, all of them show light dents in their skin plating resulting partially from welding tensions, partially from attacks of the sea or similar causes, as they are definitely typical of this class of vessels.

Superstructures:

A deckhouse standing forward of the after turret serves primarily as a substructure for the 76-mm twin turret and two medium AA guns slightly superimposed above it. The roof of this deckhouse is surrounded by a canvas-clad rail, only 50 cm high, which reaches as far as the after end of the 76-mm gun turret (in secured position) and probably only serves to prevent the cartridge cases ejected from the turret from falling on the upper deck.

The forward section of the roof is fitted with a normal canvas-clad rail, which is usual on most vessels of this class. The after Fc position is on the same level with the medium AA gun mounted aft of the after quintuple torpedo mount.

Considerations of stability seem to be the reason for the fact that the actual vertical distances between the superimposed guns and rangefinders are kept comparatively short.

B-E-C-R-E-T 25X1 -6-The after smokestack is surrounded by a superstructure, the formerd part of which, 3.2 to 3.4 m above the upper deck, seems to be the emergency comning position. This may be inferred from the canvas-covered apparatus observed there. On destroyers the after tripod must stands freely 25X1 on this platform, which is surrounded by a canvas-clad rail; whereas, on destroyers the tripod must is quite close to the smokestack. Ventilator 25X1 cowls, well protected against spray, are arranged about 2 meters above the deck at the forward edges of the platform, which are obliquely out off to increase the traversing angle of the forward quintuple torpedo mount. An installation consisting of small groups of tubes fitted to the top of the forward edge of the hood of the smokestack is a remarkable feature and possibly serves the purpose of laying oil waper screens. The jackstays are fitted parallel to the rake of the rain hood and slant aft. The part of the superstructure surrounding the smoke-stack proper is about 1.4 m higher than the forward section of the superstructure. Its purpose is not identified. Exhaust openings are fitted on each side of the after edges. Platforms resting on supports on each side of the vessel are arranged about the smokestack and, on destroyer carry a light AA gun. See also paragraph 25X1 7, Gun Armament. The after mast is a light tripod mast, whose forward leg is stayed by the two after legs. This must exclusively serves to carry the antennas and dipole frames, and also flies the commanders pennant at the top. The fore smokestack stands just abaft the forecastle deck, which necessitates the smoke duct's going into it obliquely and running forward above No. 2 boiler room. It is noted that the jackstay for the care and maintenance of the rather sharply raking smokestack is arranged parallel to the rain hood. A masher of sockets, consisting of round-iron or tubes and projecting about 1 m, are fitted below the smokestack. A white lamp or ball-shaped item, about 10 cm in dismeter, is fixed to the extremity of each of these sockets, and a metal ring of unidentified purpose runs around the smokestack a few centimeters above these balls. Unless these white balls are insulators, they are a special kind of automma. If these balls are lamps, they may be an identification night signal device. The forward masts on the destroyers are not all of similar shape. On destroyers 25X1 the three legs of the forward tripod must are of the same thickness and converge stop, forming a rather heavy trestlework of sheet metal with lightening holes. On destroyers however, the three legs form 25X1 a pyramid with a kind of platform atop, whose after edge rests on the after legs of the tripod. These two destroyers also earry a bracket for a radar measurer, the supporting knees of which are made of sheet iron provided with large lightening holes and supported by legs leshing against the two after legs of the triped. In addition, two cressing tubes are fitted to the forward edge of the platform and lean against the after legs a little more than two meters below the platform. The entire design of the musts seems to lack the homogeneity required for perfect design. Thus, the musts of destroyers obviously are 25X1 the result of alterations made to them while they were under construction rather than the outcome of an original design based on a clear and perfect conception of the purpose they had to serve, as in the case of destruyurs The constructional details, therefore, show cortain in-25X1 organic characteristics which, on the whole, prove to be rather heavy. The conning position (Cp) in the forward section of the upper part of the bridge structure is made of splintesproof material, which, however, probably cannot be very thick for reasons of weight and stability. The coming position is fitted with six lamphals-like, unglased 25 by 60-on sighting parts, one on the port, one on the starboard, and three on the forward side with two 35 cm clear-view screens fitted in the front wall, which can be protected by sheet metal deadlights during action. The protected Cp seems to be accessible through.

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the charthouse immediately adjoining it at the rear. At the floor, the Cp is

about 50 centimeters above the deck on which it stands.

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A rather spacious peacetime: steering position is fitted atep the Cp (charthouse structure) and has solid bulwarks with nozzles and guide plates to protect the personnel from inconveniences caused by winds. The steering position is accessible by stairs from the signal deck and from the charthouse below. No details of equipment of the steering position could be made out.

A shelter for the signal deck adjoins the substructure of the Cp.

Deck Equipment:

The anchors lie on the forecastle dack with the chains passing through bullring type: hawses, and a capstan is installed about 1.5 m in front of the muzzle of the forward 130-mm guns.

The forecastle deck, extending beyond the after bulkhead of the forecastle to the after edge of the forward smokestack, serves as stowage for boats, and tubular-steel davits are provided to hoist them in and out. A motor-boat (motor pinnace or similar boat) is placed on the port side under two davits of different height and outreach, the after one being higher and having the greater outreach. It could not be learned whether this after-davit also served other purposes or not and if so of what kind.

Another motorboat (a motor jolly) and, one dack higher and nearer inboard, a rowboat (life cutter) are placed on the starboard side of the forecastle dack. In this case too, the davits are of different size, the forward one having the greater outreach, which proves necessary, since the boat is not arranged parallel to the ship's side (its bow points inboard), thus pointing outboard when in swing-out position at sea. Two life rafts are available on each destroyer. They are placed on inclined bearings on each side of the vessel and ready to be slipped.

Stability:

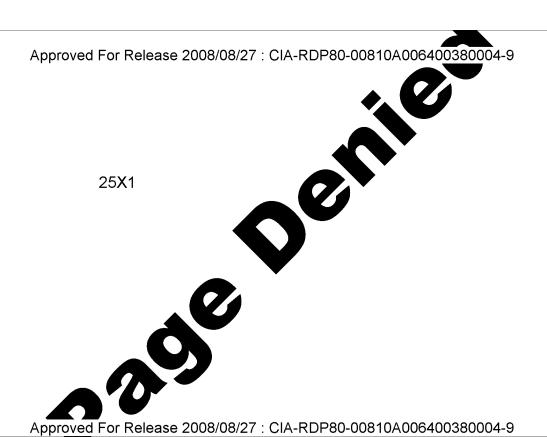
The large quantity of top weights of the armament and the electronic equipment presumably caused certain difficulties in connection with the problem of stability, as the high position of the weights considerably reduced the metacentric height. The markedly low smokestacks and the very low after superstructures, on which the weapons are superimposed closely one above the other, indicate that efforts have been made to compensate for this distribution of weights.

Reasons of stability (too heavy top weight) also seem to be the cause that, at least under peacetime conditions, platforms were left free on each side of the after smokestack and in front of the bridge on those vessels which bear AA twin mountings.

The actual value of static stability and the amount of dynamic stability are unknown and cannot be estimated. On the other hand, it seems probable that the qualities which can be influenced by them (rolling period and rolling angle) are up to the conditions prevailing in the Baltic Ses; whereas, in the long run they hardly would meet the requirements for permanent use of the vessels in the open Atlantic with its much heavier seas and longer waves.

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